



PATENT Attorney Docket No. 056291-5258

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

in te Application of: Rodney Brian Hargreaves et al	.) `	Confirmation No.: 7098
Application No.: 10/534,651)	Group Art Unit: 1625
Filed: May 12, 2005)	Examiner: Seaman, D Margaret M
For: Quinoline Derivatives as Glucokinase Ligands))	Date: June 30, 2006

Commissioner for Patents
U.S. Patent and Trademark Office
Customer Window, Mail Stop Amendment
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

UNDER 37 C.F.R. § 1.97(c)

Citation of Technically Related U.S. Patent Applications

The Examiner's attention is directed to the following technically related U.S. patents or applications of Applicant's assignee:

Inventor	U.S. Serial No.	U.S. Pub. /Patent No.	PCT Publ. No.
	Filing Date	Publication Date	Date
Barry Raymond Hayter et al.	10/482,264	US 20050054715	WO 03/000262
	December 23, 2005	March 10, 2005	January 3, 2003
Barry Raymond Hayter et al.	10/482,572	US 20040214868	WO 03/000267
	December 22, 2003	October 28, 2004	January 3, 2003
Scott Boyd et al.	10/486,496	US 20050080106	WO 03/015774
	February 11, 2004	April 14, 2005	February 27, 2003
Darren Mckerrecher et al.	10/534,650	US 20060058353	WO 2004/046139
	May 12, 2005	March 16, 2006	June 3, 2004
Peter William Rodney Caulkett	10/578,021		WO 2005/044801
et al	April 28, 2006		May 19, 2005
Craig Johnstone et al.	10/579,337		WO 2005/054200
	May 15, 2006		June 16, 2005
Craig Johnstone et al.	10/579,552		WO 2005/054233
	May 16, 2006		June 16, 2005

Where a published US application is not available, the undersigned understands that the text of each related application is essentially the same as the above listed published PCT Application.

Consideration of each listed application is earnestly solicited. Copies of the listed published PCT applications have been previously submitted to the U.S. Patent and Trademark Office.

Pursuant to 37 C.F.R. 1.56 and 1.97(c), Applicants bring to the attention of the Examiner the documents listed on the attached PTO 1449 form. This Supplemental Information Disclosure Statement (IDS) is being filed after the events recited in § 1.97(b) but, to the undersigned's knowledge, before the mailing date of either a Final Office Action or a Notice of Allowance. The Commissioner is hereby authorized to charge \$180.00, as specified by §1.17(p), to Deposit Account No. 50-0310 for this Supplemental Information Disclosure Statement under the provisions of 37 C.F.R. §1.97(c).

With the exception of the U.S. Patents, copies of the listed documents are attached. Applicants respectfully request that the Examiner initial and return the Form PTO-1449, indicating that the information has been considered and made of record herein.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed documents are material or constitute "prior art." If it should be determined that the listed documents constitute "prior art" under United States law, Applicants reserve the right to present to the office the relevant facts and law regarding the appropriate status of such document.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there are any additional fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-0310. If a fee is required for an extension of time under 37 C.F.R.

§1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Date:

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June 30, 2006

By:

Morgan Lewis & Bockius LLP Customer No. 09629 1111 Pennsylvania Avenue, N.W. Washington, D.C. 20004

Tel. No.: 202-739-3000

Gregory T. Lowen Registration No. 46,882

Tel. No.: (202) 739-5320 Fax No.: (202) 739-3001

INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)

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Applicants: Rodney Brian Hargreaves et al.

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U.S. PATENT DOCUMENTS

Initial		Document No.	Date	Name	Class	Sub-Class	Filing Date
	1.	US 4,146,631	March 27, 1979	Ford, et al.	514	381	November 3, 1977

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub-Class	Translation
2.	EP 1600442	November 30, 2005	Europe			
3.	JP 08 173525	July 9, 1996	Japan			Abstract
4.	JP 08 301760	November 19, 1996	Japan			Yes
5.	WO 01/19788	March 22, 2001	WIPO			
6.	WO 2004/076420	September 10, 2004	WIPO			Yes
7.	WO 2005/063738	July 14, 2005	WIPO			Yes
8.	WO 2005/066145	July 21, 2005	WIPO			
9.	WO 2005/080359	September 1, 2005	WIPO			
10.	WO 2005/080360	September 1, 2005	WIPO			
11.	WO 2005/090332	September 29, 2005	WIPO			Yes
12.	WO 2005/095417	October 13, 2005	WIPO			
13.	WO 2005/095418	October 13, 2005	WIPO			
14.	WO 2005/103021	November 3, 2005	WIPO			
15.	WO 2005/121110	December 22, 2005	WIPO			
16.	WO 2005/123132	December 29, 2005	WIPO			
17.	WO 2006/016174	February 16, 2006	WIPO			
18.	WO 2006/016178	February 16, 2006	WIPO			
19.	WO 2006/016194	February 16, 2006	WIPO			
20.	WO 2006/040527	April 20, 2006	WIPO			
21.	WO 2006/040528	April 20, 2006	WIPO	1		
22.	WO 2006/040529	April 20, 2006	WIPO	1		
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

- 23. Anderson et al "Pyridopyrimidines. 6. Nucleophilic substitutions in the Pyrido[2,3-d]pyrimidine series" J. Org. Chem. 42(6):993-996 (1977)
 - 24. Ando et al. "Fluoride salts on alumina as reagents for alkylation of phenols and alcohols" Bull. Chem. Soc. Jpn., 55:2504-2507 (1982)
 - 25. Coghlan "Small molecule Glucokinase Activators (GKAs) as novel anti-diabetic agents" Society for Medicines Research Seminar (June 2004)
 - 26. Coghlan "Small molecule Glucokinase Activators (GKAs) as novel anti-diabetic agents" CIDEM seminar (May 2005)
 - 27. Gill et al. "Stimulation of insulin release by a small molecule glucokinase activator" EASD Islet Study Group Abstract (November 2005)
 - 28. Kunishima et al. "4-(4,6-Dimethoxy-1,3,5-triazin-2-yl)-4-methyl-morpholinium chloride: An efficient condensing agent leading to the formation of amides and esters" Tetrahedron 55:13159-13170 (1999)
 - 29. Leighton et al. "Small molecule glucokinase activators as novel anti-diabetic agents" Biochem Soc Trans. 33(Pt 2):371-374 (April 2005)
- 30. McKerrecher "Design and synthesis of novel glucokinase activators" 13th RSC-SCI Medicinal Chemistry Symposium, Churchill College Cambridge (September 2005)

Examiner

Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) PTO Form 1449 June 30, 2006			Attorney Docket No. 056291-5258		Application No. 10/534,651					
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			FOREIGN	PATENT DOCUMENTS						
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	31.	McKerrecher et al "De	CUMENTS (Includes in and synthesis of	ling Author, Title, Date, P f novel glucokinase activate	ertinent Pa	ges, etc.)	for type 2 diabetes"			
] 71.	Frontiers in Medicinal	Chemistry, Frankfur	t (March 2006)						
	32.	McKerrecher et al. "De Chem Lett. 16(10):270	sign of a potent, solu 5-2709 (2006 May 1	uble glucokinase activator w 5) Epub 2006 Feb 28	vith exceller	t in vivo eff	icacy" Bioorg Med			
	33.	McKerrecher et al. "Ide Swedish Medicinal Che	entification of orally	bioavailable small molecule	e activators	of glucokina	se" Abstract, Anglo-			
	34.	McKerrecher et al. "Ide RSC Medicinal Chemis	entification of orally stry Symposium, Car	ally bioavailable small molecule activators of glucokinase" Abstract, 12 th SCI-Cambridge, UK, 7-10 September 2003 (poster 21) and 227 th American						
	35.	Sekera et al. "No 69	Chemical Society National Meeting and Exposition, Anaheim, California, 28 March-1 April 2004 (paper 341) lekera et al. "No 69. – Recherches sur les anesthesiques locaux (XI memoire) Synthese de quelques nouveaux β- lcoxyethoxycarbanilates et β-alcoxyethoxycinchonamides amines" Bull Chem Soc France 401-404 (1959)							
	36.	Vertigan et al. "Impact agents" Diabetologia, \	of cell glycogen con	f cell glycogen content on modulation of hepatocyte glucose metabolism by pharmacological						
	 	agents Diabetologia,	701 47 Supp 1, A214	, 587 (2004)						
	 									
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